CLAIMS

What is claimed is:

1. A tunable discrete LC filter comprising:

an input for receiving an input signal for processing, said input signal comprising a plurality of frequencies;

control input for receiving information to select at least one band of frequencies for processing;

first inductor bank for filtering a first band of frequencies;

second inductor bank for filtering a second band of frequencies; and

switch circuit, coupling said input signal to said first inductor bank and said second inductor bank, so as to electrically isolate said switching of said input signal to said first inductor bank and said second inductor bank, respectively, said switch circuit for selecting said first inductor bank if said first band of frequencies is selected, and for selecting said second inductor bank if said second band of frequencies is selected.

2. A method for tuning a discrete LC filter, said method comprising the steps of:

receiving an input signal for processing, said input signal comprising a plurality of frequencies;

receiving information to select at least one band of frequencies for processing;

switching said input signal to a first signal path if a first band of frequencies was selected;

coupling a first inductor bank to said first signal path;

electrically isolating said switching of said input signal from said first inductor bank;

filtering said first band of frequencies in said first inductor bank;

switching said input signal to a second signal path if a second band of frequencies was selected;

coupling a second inductor bank to said second signal path;

electrically isolating said switching of said input signal from said second inductor bank; and

filtering said second band of frequencies in said second inductor bank.